10/538155 IN THE CLAIMS JC17 Rec'd PC1/P10 08 JUN 2005

Please amend the claims to read as follows:

- 1. (original) A method of analyzing an organic medium potentially including defects within a noisy structure, such that said medium is excited by ultrasonic signals emitted by a set of N transducers and focused at a given depth at M distinct successive excitations in order to obtain an image of said depth after reception of the responses from the medium, such that it also includes the steps of:
- constructing a rectangular response matrix of dimension N*M, a coefficient K_{nm} of which represents the response of the medium received by the transducer n following an excitation m,
- decomposition of said response matrix into singular values,
- use of the singular vectors corresponding to said singular values in order to locate singular zones corresponding to defects in the medium.
- 2. (currently amended) An analysis method as claimed in claim 1, according to which a response matrix K_{nm} is obtained for a plurality of frequencies.
- 3. (currently amended) An analysis method as claimed in one of claims 1 or 2, according to which M successive excitations are carried out for a plurality of depths of said medium.
- 4. (original) An ultrasonic medical imaging apparatus intended for analyzing a medium potentially including defects within a noisy structure, said apparatus including a set of transducers for emitting ultrasonic signals focused at a given depth according to M distinct successive excitations, an image formation module in order to obtain an image of said depth after reception of the responses from the medium, such that it includes a module for exploiting said responses in order:
- to construct a rectangular response matrix of dimension N*M, a coefficient K_{nm} of which represents the response of the medium received by the transducer n following an excitation m,
- to decompose said response matrix into singular values,

- to use the singular vectors corresponding to said singular values in order to locate singular zones corresponding to defects in the medium.
- 5. (original) An apparatus as claimed in claim 4, such that a response matrix K_{nm} is constructed for a plurality of frequencies.
- 6. (currently amended) An apparatus as claimed in one of claims 4 or 5, according to which M successive excitations are carried out for a plurality of depths of said organic medium.
 - 7. (canceled)
- 8. (new) A method as claimed in claim 2, according to which M successive excitations are carried out for a plurality of depths of said medium.
- 9. (new) An apparatus as claimed in claim 4, according to which M successive excitations are carried out for a plurality of depths of said organic medium.